

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous claims in the application.

Listing of Claims:

1. (Currently Amended) A method of detecting or differentiating rheumatoid arthritis, comprising:

measuring the level wherein the levels of human lipocalin-type prostaglandin D synthase (L-PGDS) in a sample collected from a subject is measured free of renal disease and/or ischemic heart disease; and

detecting or differentiating rheumatoid arthritis if the level of L-PGDS is higher in the sample collected from the subject free of renal disease and/or ischemic heart disease than it is in a healthy volunteer and/or in a patient with a joint disease other than rheumatoid arthritis.

2. (Currently Amended) The method of detecting or differentiating rheumatoid arthritis according to claim 1, wherein

the levels of human L-PGDS in a sample collected from a subject is measured, and the measured level of human L-PGDS measurement value is compared with a predetermined cut-off value that has been predetermined based on measurements values of human L-PGDS in samples collected from healthy volunteers and/or patients with joint diseases other than rheumatoid arthritis.

3. (Currently Amended) A method of determining the stage of disease with regard to rheumatoid arthritis, comprising:

~~measuring the level wherein the levels of human L-PGDS in a sample collected from a subject free of renal disease and/or ischemic heart disease; is measured and~~

~~determining the stage of disease with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the stage of disease is estimated based on the measurement value.~~

4. (Currently Amended) The method of determining the stage of disease with regard to rheumatoid arthritis according to claim 3, wherein

~~the levels of human L-PGDS in a sample collected from a subject is measured and the measurement value~~ measured level of human L-PGDS is compared with a predetermined cut-off value ~~that has been predetermined based on classification of measurements values of human L-PGDS in samples collected from rheumatoid arthritis patients~~ classified in accordance with the stage of disease.

5. (Currently Amended) A method of determining the degree of dysfunction or severity with regard to rheumatoid arthritis, comprising:

~~measuring the level wherein the levels of human L-PGDS in a sample collected from a subject free of renal disease and/or ischemic heart disease; is measured and~~

~~determining the degree of dysfunction or [[(]]severity[(]] with regard to rheumatoid arthritis, wherein L-PGDS concentration increases with advancement of the degree of dysfunction or severity is estimated based on the measurement value.~~

6. (Currently Amended) The method of determining the degree of dysfunction or severity with regard to rheumatoid arthritis according to claim 5, wherein

the measured level ~~levels~~ of human L-PGDS ~~in a sample is measured and the~~ ~~measurement value~~ is compared with ~~[[the]]~~ a predetermined cut-off value ~~that has been~~ ~~predetermined~~ based on ~~classification of measurements~~ values of human L-PGDS in samples collected from rheumatoid arthritis patients classified in accordance with the degree of dysfunction or ~~[[the]]severity[[the]]~~.

7. (Currently Amended) The method according to claim 1, wherein the ~~levels~~ level of human L-PGDS in a sample is measured by immunoassay.

8. (Previously Presented) The method according to claim 1, wherein the sample is a body fluid.

9. (Previously Presented) The method according to claim 1, wherein the sample is a joint fluid.

10. (Previously Presented) The method according to claim 1, wherein the sample is urine or blood.

11. – 14. (Canceled)

15. (New) The method according to claim 2, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma$ x standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).

16. (New) The method according to claim 4, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma$ x standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).

17. (New) The method according to claim 6, wherein the cut-off value is the upper limit of a reference interval obtained by the following equation: mean value $\pm \sigma$ x standard deviation ($\sigma = 0.5, 1, 2, 3, \text{ or } 5$).